



Minimum thickness, in inches, of ice on which it's safe to drive an SUV or pickup.

12

## Montana Outdoors repeats with top magazine award

*Montana Outdoors*, the magazine of Montana Fish, Wildlife & Parks, won first place in the overall magazine category at the national Association for Conservation Information 2022 award competition held on July 28 in Lake Tahoe, Nevada.

This is the second consecutive first-place overall magazine win for the publication and its eighth in the past 20 years.

*Montana Outdoors* also won second place in the Destination, Historical or Cultural Article category with "A Place of Prominence," a profile of First Peoples Buffalo Jump State Park; third in the General Interest Article category with "The Lower Yellowstone's Untapped Potential," on plans to boost recreation on the river; and third in the Wildlife Article category for "Leave It to Beavers," on how the industrious rodents help conserve water for fish, wildlife, and agriculture.

Formed in 1938, the ACI is a national nonprofit organization of communicators working for state, federal, and private conservation agencies and organizations. ■



Roster leading a shotgunning clinic in Helena

HUNTING

## Who the heck is Tom Roster?

**D**uck and goose hunters: Ever wonder about that "Tom Roster's Nontoxic Shot Lethality Table" in the back of the waterfowl hunting regulations?

A world-renowned authority on steel, bismuth, and other nontoxic shot, Roster was a longtime consultant to the Cooperative North American Shotgunning Education Program (CONSEP). The nonprofit group was formed in 1982 and funded by several state conservation agencies, including FWP, to improve hunter proficiency with steel and other nontoxic shot.

The agencies were concerned about excessive waterfowl wounding by hunters unaccustomed to using federally required nontoxic shot. CONSEP was created in part to help waterfowlers learn to shoot steel shot more effectively.

According to Roster, the main difference between steel and lead shot is that some lead pellets deform in the air and thus move more slowly. This creates a longer shot string that makes for a more "forgiving" shot load—as long as the shot is placed well in front of the flying bird. Though shorter—due to fewer deformed pellets—the steel-shot string is also something hunters can use to their advantage. "The worst thing you can do is shoot behind the target, because you're not taking advantage of the shot string," Roster says.

In addition, because a lead BB is denser

than a similar-size steel one, it punches deeper into the bird. To get the same lethality, a shooter needs a bigger and thus heavier shot size in steel than with lead. (Nontoxic HEVI-Shot is similar to lead in density.)

That's where Roster's table comes in. It shows the size of steel shot that's most effective on various sizes of waterfowl at various distances.

In a recent issue of *Outdoor Life*, Roster talks about steel shot lethality and the results of his 40 years of testing. His three main points:

- ▶ Because steel is less forgiving than lead, it requires more accurate shooting skill.
- ▶ The most-lethal steel loads for large ducks like mallards are No. 2, with No. 3 a close second. (Note that, surprisingly, No. 2 is also the most effective steel load for pheasants.) The most lethal steel load for Canada geese is BBB.
- ▶ Increased load velocity does not make a load more lethal or effective. ■

Read the article at [outdoorlife.com](https://www.outdoorlife.com)

Read more on shooting effectively with steel in "Too Many Misses," *Montana Outdoors* September-October 2013.



CLOCKWISE FROM TOP LEFT: MIKE MORAN ILLUSTRATION; KANKANEE VALLEY POST



FWP Anaconda District game warden Sara Busso

ENFORCEMENT

## Women wardens workshop

**F**WP held its first workshop for potential female game wardens on September 16 at the Montana WILD Education Center in Helena. The five-hour event attracted 28 women interested in learning about a career enforcing Montana's game and outdoor recreation laws.

The workshop was part of the FWP Law Enforcement Division's effort to attract more candidates during the 2023 recruitment period, which begins December 4.

The workshop covered:

- ▶ A warden's typical day
- ▶ The process for becoming an FWP game warden
- ▶ Stories from current female wardens
- ▶ Mock investigations
- ▶ Ride-alongs with wardens.

"We were extremely pleased with the turnout," says Sergeant Brooke Shelley. "Hopefully, some of the women who came will consider joining us in wearing the Montana game warden badge."

Learn more about being a warden by watching the video featured on page 12 of this issue, and by visiting [fwp.mt.gov/about/fw/enforcement/warden-hiring](https://fwp.mt.gov/about/fw/enforcement/warden-hiring). ■

BOOK REVIEWS

## Recommended reading

### Our favorite books of 2023

#### Traditional Bows and Wild Places

By E. Donnell Thomas, Jr.

Don Thomas, of Lewistown, is a longtime *Montana Outdoors* contributor, the author of 20 hunting and fishing books, and a retired rural physician (in Montana and in Alaska, where he was also a bush pilot, commercial fisherman, and bear hunting guide). His latest book is a fascinating account of using traditional longbows to hunt everything from javelina and wild turkeys to mountain goats and African Cape buffalo.

viewers on a journey to 26 areas from Glacier National Park to Ekalaka. We almost don't want to recommend this stunning photography collection, because anyone who sees it will want to immediately move to Montana.

#### Western Water A to Z: The History, Nature, and Culture of a Vanishing Resource

By Robert R. Crifasi

This is one of two books on water we couldn't put down—and they could not be more different. *Western Water A to Z* is a comprehensive guide by a Colorado-based environmental scientist that clearly explains topics like hydrographs, floodplains, in-stream flows, watersheds, and irrigation. Though organized like an encyclopedia, the lively, engaging writing includes sections on Indigenous and European-American history and famous personalities like John Wesley Powell. Richly illustrated with maps and stunning photography.

#### Water Worlds

Edited by Rachel Taylor

If Crifasi's guide tells you everything you need to know about water conservation and management, this gorgeous coffee-table book largely lets photography speak to the beauty and wonder of water. Focusing on 12 locations across the planet, *Water Worlds* takes readers on a journey through every major type of water system, explaining how they work and what must be done to, in the words of editor Rachel Taylor, "sustain the abundance of life that comprises our incredible world." ■

#### Montana Panoramic

Craig W. Hergert. Essays by Shann Ray.

Few images capture the grandeur of Montana—big sky, big land, big mountains, big everything—as well as Bozeman photographer Craig Hergert's panoramic photographs. In his newest coffee-table book, Hergert takes

